

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY



To:

BECKHAM R., Intellect Property Dept  
INTELLECTUAL PROPERTY  
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(PCT Rule 66)

Date of mailing  
(day/month/year)

**15. 12. 95**

Applicant's or agent's file reference <b>IPD/P1128/WOD</b>		<b>REPLY DUE</b> within <b>3</b> months/ days from the above date of mailing
International application No. <b>PCT/ GB 95/ 00629</b>	International filing date (day/month/year) <b>22/03/1995</b>	Priority date (day/month/year) <b>23/03/1994</b>
International Patent Classification (IPC) or both national classification and IPC <b>C12N15/53</b>		
Applicant <b>THE SECRETARY OF STATE FOR DEFENCE et al.</b>		

1. This written opinion is the \_\_\_\_\_ (first, etc.) drawn up by this International Preliminary Examining Authority.

2. This report contains indications and corresponding pages relating to the following items:

- I  Basis of the opinion
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

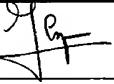
**When?** See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3.  
For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also** For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.  
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: **23/07/1996**.

<b>Name and mailing address of the IPEA</b>  European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Netherlands Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	<b>Authorized officer</b>  <b>J. Espen</b>
	<b>Examiner</b> <b>Formalities officer</b> (incl. extension of time limits) <b>G.L.M. Kruydenberg</b> <b>Telephone No.</b>

**I. Basis of the opinion**

1. This opinion has been drawn up on the basis of:

the international application as originally filed

the description, pages as originally filed  
pages filed with the demand  
pages , filed with the letter of

the Claims No. as originally filed  
No. as amended under Article 19  
No. , filed with the demand  
No. , filed with the letter of

the drawings, sheets / fig. as originally filed  
sheets / fig. , filed with the demand  
sheets / fig. , filed with the letter of

2. The amendments have resulted in the cancellation of:

pages:  
 Claims No.  
 drawings, sheets / fig.

3.  This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2 c)).

4. Additional observations, if necessary:

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty	Claims	1-5,7-13,15-16,22
	Claims	
Inventive Step	Claims	
	Claims	
Industrial Applicability	Claims	
	Claims	

2. Citations and Explanations

EMBL-database entry Emsyn:Cvpgemluc, Accession number: X65316 (Rel. 31, 07-04-1992) (**D1**) discloses a DNA sequence (mRNA: complement 57-1756; CDS complement: 105-1756) encoding a protein having luciferase activity and having 99,8% homology with the reverse DNA sequence of SEQ ID NO: 1 in a 1722 bp overlap. In fact, the bases 693-695 of D1 correspond to the three bases N at 1063 to 1065 (SEQ ID NO: 1) and they code for the amino acid Leu. Moreover, the person skilled in the art would consider that the corresponding protein sequence is an inherent property of said DNA sequence .

In consequence, D1 is novelty destroying for claims 1-5,7-13, 15-16, and 22.

Furthermore, the property of thermostability does not render said luciferase novel, since this appears to be an inherent property of a luciferase having an amino acid other than glutamate at residue 354 (Photinus) or 356 (Luciola).

Therefore, claims 1-5,7-13, 15-16, and 22 are not allowable under Art. 33 (2) PCT.